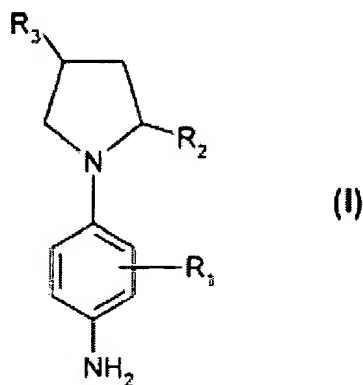


WHAT IS CLAIMED IS:

1. A composition for oxidation dyeing keratinous fibers comprising, in a medium suitable for dyeing:

- (i) at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,
- R<sub>2</sub> is chosen from a hydrogen atom, a -CONH<sub>2</sub> group, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups, and
- R<sub>3</sub> is chosen from a hydrogen atom, and a hydroxyl group, and

- (ii) at least one thickening polymer comprising at least one sugar unit.

2. A composition according to claim 1, wherein said keratinous fibers are human keratinous fibers.

3. A composition according to claim 2, wherein said human keratinous fibers are human hair.

4. A composition according to claim 1, wherein said  $R_1$ , said  $R_2$ , and said  $R_3$  are each a hydrogen atom.

5. A composition according to claim 1, wherein said  $R_1$  and said  $R_3$  are each a hydrogen atom and said  $R_2$  is a  $-CH_2OH$  group.

6. A composition according to claim 1, wherein said  $R_1$  is a hydrogen atom, said  $R_2$  is a  $-CH_2OH$  group, and said  $R_3$  is a hydroxyl group.

7. A composition according to claim 1, wherein said  $R_1$  and said  $R_3$  are each a hydrogen atom and said  $R_2$  is a  $-CONH_2$  group.

8. A composition according to claim 1, wherein said acid addition salts of said 1-(4-aminophenyl)pyrrolidines of formula (I) are chosen from hydrochlorides, hydrobromides, sulphates, tartrates, lactates, and acetates.

9. A composition according to claim 1, wherein said at least one oxidation dye precursor is present in said composition in an amount ranging from 0.001% to 10% by weight relative to the total weight of the composition.

10. A composition according to claim 9, wherein said at least one oxidation dye precursor is present in said composition in an amount ranging from 0.01% to 8% by weight relative to the total weight of the composition.

11. A composition according to claim 1, wherein said at least one thickening polymer comprising at least one sugar unit is chosen from:

- (1) nonionic guar gums;
- (2) biopolysaccharide gums of microbial origin;
- (3) gums derived from plant exudates;
- (4) pectins;
- (5) alginates;
- (6) starches; and
- (7) hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl celluloses and carboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl celluloses.

12. A composition according to claim 11, wherein said biopolysaccharide gums of microbial origin are chosen from Scleroglucan gum and Xanthan gum.

13. A composition according to claim 11, wherein said gums derived from plant exudates are chosen from gum Arabic, Ghatti gum, Karaya gum, Tragacanth gum, Carrageenan gum, Agar gum, and Carob gum.

14. A composition according to claim 1, wherein said at least one thickening polymer comprising at least one sugar unit is chosen from unmodified nonionic guar gums.

15. A composition according to claim 11, wherein said hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl celluloses are chosen from hydroxyethyl celluloses and hydroxypropyl celluloses.

16. A composition according to claim 11, wherein said carboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl celluloses are chosen from carboxymethyl celluloses.

17. A composition according to claim 1, wherein said at least one thickening polymer comprising at least one sugar unit is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of said composition.

18. A composition according to claim 1, wherein said at least one thickening polymer comprising at least one sugar unit is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of said composition.

19. A composition according to claim 1 further comprising at least one coupler.

20. A composition according to claim 19, wherein said at least one coupler is chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthols, heterocyclic couplers, and acid addition salts of any of the foregoing compounds.

21. A composition according to claim 19, wherein said at least one coupler is chosen from 2,4-diamino-1-( $\beta$ -hydroxyethyloxy)benzene, 2-methyl-5-aminophenol, 5-N-( $\beta$ -hydroxyethyl) amino-2-methylphenol, 3-aminophenol, 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxy-benzene, 2-amino-4-( $\beta$ -hydroxyethylamino)-1-methoxy-benzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, sesamol, 1-amino-2-methoxy-4,5-methylenedioxybenzene,  $\alpha$ -naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 6-hydroxy-indoline, 2,6-dihydroxy-4-methylpyridine, 1-H-3-methyl-pyrazol-5-one, 1-phenyl-3-methylpyrazol-5-one, 2-amino-3-hydroxypyridine, 3,6-dimethylpyrazolo[3,2-c]-1,2,4-triazole, 2,6-dimethylpyrazolo[1,5-b]-1,2,4-triazole and acid addition salts of any of the foregoing compounds.

22. A composition according to claim 19, wherein said at least one coupler is present in said composition in an amount ranging from 0.0001% to 15% by weight relative to the total weight of the composition.

23. A composition according to claim 1 further comprising at least one oxidation base, other than said at least one oxidation dye precursor, in an amount ranging from 0.0001% to 15% by weight relative to the total weight of said composition.

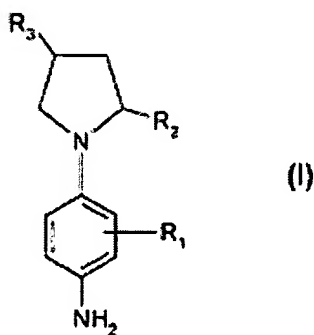
24. A composition according to claim 1 further comprising at least one direct dye in an amount ranging from 0.001% to 20% by weight relative to the total weight of said composition.

25. A composition according to claim 1 further comprising at least one agent chosen from reducing agents and antioxidants, wherein said at least one agent is present in said composition in an amount ranging from 0.05% to 1.5% by weight relative to the total weight of said composition.

26. A composition according to claim 1 further comprising at least one cationic polymer in an amount of at least 0.01% by weight relative to said composition.

27. A composition for oxidation dyeing keratinous fibers comprising, in a medium suitable for dyeing:

- (i) at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,
- R<sub>2</sub> is chosen from a hydrogen atom, a -CONH<sub>2</sub> group, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups, and
- R<sub>3</sub> is chosen from a hydrogen atom, and a hydroxyl group, and

- (ii) at least one thickening polymer comprising at least one sugar unit, and
- (iii) at least one oxidizing agent.

28. A composition according to claim 27, wherein said at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, alkali metal ferricyanides, persalts, and oxidation-reduction enzymes

29. A composition according to claim 28, wherein said at least one oxidizing agent is chosen from laccases, peroxidases and 2-electron oxidoreductases, where appropriate in the presence of their respective donor or cofactor.

30. A composition according to claim 28, wherein said at least one oxidizing agent is hydrogen peroxide.

31. A composition according to claim 28, wherein said at least one oxidizing agent comprises a solution of hydrogen peroxide with a titre ranging from 1 to 40 in volume.

32. A composition according to claim 1, wherein said composition for oxidation dyeing keratinous fibers has a pH ranging from 3 to 12.

33. A composition according to claim 27, wherein said composition for oxidation dyeing keratinous fibers has a pH ranging from 3 to 12.

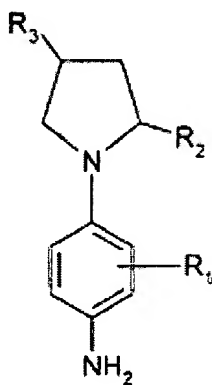
34. A composition according to claim 27 further comprising at least one surfactant chosen from anionic surfactants, cationic surfactants, nonionic surfactants, and amphoteric surfactants.

35. A composition according to claim 34, wherein said at least one surfactant is present in said composition in an amount ranging from 0.1% to 20% by weight relative to the total weight of said composition.

36. A method for oxidation dyeing keratinous fibers comprising:

(A) applying to said fibers at least one dyeing composition comprising, in a medium suitable for dyeing:

(i) at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



(I)

wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,
- R<sub>2</sub> is chosen from a hydrogen atom, a -CONH<sub>2</sub> group, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups, and
- R<sub>3</sub> is chosen from a hydrogen atom, and a hydroxyl group, and

optionally comprising:

- (ii) at least one thickening polymer comprising at least one sugar unit, and

(B) developing a color by applying to said fibers at least one oxidizing composition comprising:

- at least one oxidizing agent and
- optionally comprising said at least one thickening polymer comprising at least one sugar unit,
- wherein said at least one oxidizing composition is
  - applied to said fibers after combining, at the time of use, said at least one oxidizing composition with said at least one dyeing composition, or
  - applied to said fibers either simultaneously with or immediately after said at least one dyeing composition, without intermediate rinsing, and

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- (C) provided that said at least one thickening polymer comprising at least one sugar unit is present in at least one of said at least one dyeing composition or said at least one oxidizing composition.

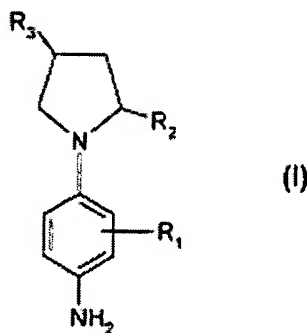
37. A method according to claim 36, wherein said keratinous fibers are human keratinous fibers.

38. A method according to claim 37, wherein said human keratinous fibers are human hair.

39. A method for oxidation dyeing keratinous fibers comprising:

- (A) preparing at least one dyeing composition comprising, in a medium suitable for dyeing:

- (i) at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,

- R<sub>2</sub> is chosen from a hydrogen atom, a -CONH<sub>2</sub> group, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups, and
- R<sub>3</sub> is chosen from a hydrogen atom, and a hydroxyl group,
- (ii) at least one thickening polymer comprising at least one sugar unit, and
- (iii) at least one oxidizing agent,

- (B) developing a color by applying said at least one dyeing composition prepared in (A) above to said fibers,
- (C) leaving said at least one dyeing composition prepared in (A) above on said fibers for a time ranging from 1 to 60 minutes,
- (D) rinsing said fibers, optionally shampooing said fibers, and optionally further rinsing said fibers, and
- (E) drying said fibers.

40. A method according to claim 39, wherein said keratinous fibers are human keratinous fibers.

41. A method according to claim 40, wherein said human keratinous fibers are human hair.

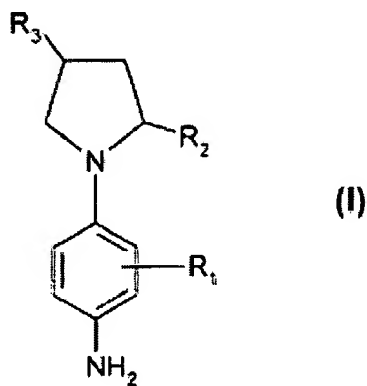
42. A method according to claim 39, wherein said leaving time is a time ranging from 10 to 45 minutes.

43. A method according to claim 39, wherein said human hair is chosen from wet human hair and dry human hair.

44. A kit for oxidation dyeing keratinous fibers comprising at least two compartments, wherein:

(A) a first compartment comprises at least one dyeing composition comprising, in a medium suitable for dyeing:

- (i) at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,
- R<sub>2</sub> is chosen from a hydrogen atom, a -CONH<sub>2</sub> group, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups, and
- R<sub>3</sub> is chosen from a hydrogen atom, and a hydroxyl group,

and optionally comprising:

- (ii) at least one thickening polymer comprising at least one sugar unit,

(B) a second compartment comprises at least one oxidizing agent and optionally comprises said at least one thickening polymer comprising at least one sugar unit, and

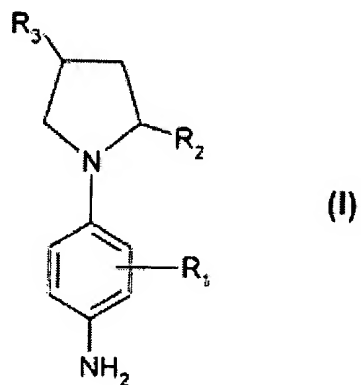
(C) provided that said at least one thickening polymer comprising at least one sugar unit is present in at least one of said first compartment or said second compartment.

45. A kit according to claim 44, wherein said keratinous fibers are human keratinous fibers.

46. A kit according to claim 45, wherein said human keratinous fibers are human hair.

47. A kit for oxidation dyeing keratinous fibers comprising at least three compartments, wherein:

(A) a first compartment comprises at least one dyeing composition comprising, in a medium suitable for dyeing, at least one oxidation dye precursor chosen from 1-(4-aminophenyl)-pyrrolidines of formula (I) and acid addition salts thereof:



wherein:

- R<sub>1</sub> is chosen from a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl groups, C<sub>1</sub>-C<sub>5</sub> monohydroxyalkyl groups, and C<sub>2</sub>-C<sub>5</sub> polyhydroxyalkyl groups,

- $R_2$  is chosen from a hydrogen atom, a  $-\text{CONH}_2$  group,  $\text{C}_1\text{-C}_5$  monohydroxyalkyl groups, and  $\text{C}_2\text{-C}_5$  polyhydroxyalkyl groups, and
- $R_3$  is chosen from a hydrogen atom, and a hydroxyl group,

(B) a second compartment comprises at least one thickening polymer comprising at least one sugar unit, and

(C) a third compartment comprises at least one oxidizing agent.

48. A kit according to claim 47, wherein said keratinous fibers are human keratinous fibers.

49. A kit according to claim 48, wherein said human keratinous fibers are human hair.

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